



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

## RIVER SURVEYS IN THE UNITED STATES.

An important geographic work, begun a year ago by the topographic branch of the United States Geological Survey in co-operation with the hydrographic branch of the same bureau, is the survey of the rivers of the United States. The purpose of these surveys is to study in detail all those facts connected with the river systems, including slope, character of beds and banks, and discharge, which may have any bearing upon the problems of the development of such streams and sources of water-power or supply. In other words, these river surveys are to become complete topographic, hydrographic, and economic studies of all rivers of the country. This is a geographic work of the broadest scope, in that many of the branches of geographic science are outlined in the progress of the investigation.

As developed in the field work of the past year, and in the office work of studying the results during the current winter, these surveys will be conducted on the following general lines: The topographic branch will make topographic surveys of the beds and banks of the streams from above tide-water to the highest points on the tributary streams at which the volume of the discharge will warrant the making of the investigation. This survey consists in the transverse or meander of the stream bottom, mapped on the scale of 2,000 feet to one inch, showing the outlines of the banks, islands, rapids and shoals, tributary streams, swamps, etc. Contours of 10-foot interval are sketched, showing the crossings of main water surfaces and the topography of the surrounding stream valley to a distance of a few hundred feet. The route traversed is accompanied by a line of careful levels tied to the precise level net of the United States, thus reducing them to mean sea-level. In the course of these levels benchmarks are set at every mile, and elevations are recorded at all changes in water surface, tops and bottoms of rapids, junctions with tributaries, etc. Running notes are kept of the character of the vegetation, forestry, rock, and industries along the streams.

The resulting maps drawn up in office by the topographers will be published in two forms; first, the condensed profile of the water surface accompanied by a list of elevations, with descriptions of benchmarks and a brief report of the physical characteristics of the stream and its economic possibilities. These results are to be

published in the annual report on stream gauging issued by the hydrographic branch in its series of water supply papers. Secondly, the hydrographic branch will meantime conduct observations over a period of years to determine the discharge of each stream, and a water supply engineer will examine the stream with a view to determining possibilities of constructing dams for development of water-power or for water storage. As soon as sufficient data are available, there will be issued, in folio form, similar to the geologic atlas of the United States, separate folios for each river system, accompanied by the topographic map resulting from the route surveyed, a detailed profile, the results of the hydrographic studies of the discharge, etc., and the report on the availability of the stream for water-power or supply.

During the past season the following streams were surveyed in the manner above described:

UPPER EASTERN MISSISSIPPI.—Chippewa River, Wis., 42.5 miles, from Chippewa Falls to The Forks, near Flambeau.

KENNEBEC.—Kennebec River, Me., for 135 miles, from tide-water near Hallowell to Moose Head Lake, Me.

TENNESSEE.—Buffalo River, Tenn., 47 miles, from near Flat Woods to near Buffalo.

TENNESSEE.—Notteley River, N. C., Ga., 38 miles, from near Murphy, N. C., to near Blairsville, Ga.

TENNESSEE.—Hiwassee River, N. C., Ga., 63.3 miles, from Hiwassee to Tennessee State line near Apalachia.

TENNESSEE.—Toccoa River, Ga., 37.5 miles, from near Dial, Ga., to Tennessee State line, near McCays, Tenn.

SANTEE.—Catawba River, N. C., 45 miles, from near Marion to near Connelly Springs.

SAVANNAH.—Tallulah, Tugaloo, and Savannah Rivers, Ga., S.C., 95 miles, from Tallulah Falls to mouth of Broad River, near Lisbon, Ga.

SAVANNAH.—Tallulah River, Ga., 29.3 miles, from near Tallulah Falls to near Blalock, Ga.

SAVANNAH.—Broad River, Ga., 66.5 miles, from its mouth near Lisbon Point to near Carnesville, Ga.

ALTAMAHA.—Alcovy River, Ga., 18.3 miles, from its mouth near Worthville to Dailey's Bridge, near Starsville.

ALTAMAHA.—South River, Ga., 56.8 miles, from Constitution to its junction with Yellow River, near Worthville.

ALTAMAHA.—Ocmulgee River, Ga., 49.5 miles, from mouth of Yellow River, near Worthville, to Macon.

ALTAMAHA.—Yellow River, Ga., from its mouth near Worthville to near Yellow River, 57.3 miles.

ALTAMAHA.—Towilaga River, Ga., 21.7 miles, from near Berner to High Falls.

CHATTAHOOCHEE.—Soque River, Ga., 8.8 miles, from its mouth near View to Clarksville.

CHATTAHOOCHEE.—Chattahoochee River, Ga., 64.7, miles, from Chattahoochee to Franklin, and from near Chestatee to near Santee, 55 miles, and from near West Point to near Columbus, 35 miles.

CHATTAHOOCHEE.—Chestatee River, Ga., 47.7 miles, from Wil-  
low to its mouth near Chestatee.

SAVANNAH.—Chattooga River, Ga., S. C., 29.3 miles, from its mouth near Tallulah Falls to near Russell, S. C.

---

## GEOGRAPHICAL RECORD.

### AMERICA.

THE PAN-AMERICAN RAILROAD.—Marked progress is being made towards carrying out the Pan-American railroad project. Mr. Charles M. Pepper, Special Commissioner appointed by President Roosevelt, has returned from his visit to the Latin-American Republics. He found a very friendly disposition on the part of the various countries, some of which have adopted special legislation in the interest of the intercontinental railroad connection. Several countries are building railroads along the lines of the intercontinental surveys, while in other countries concessions have been made with this special end in view. His full report will be issued in a short time. (*Bull. of the International Bureau of Amer. Reps.*, February, 1904.)

THE DELTA OF SAINT CLAIR RIVER.—The fact that the St. Clair River, flowing out of one of the Great Lakes, (Lake Huron,) has built a fairly large and quite broad delta where it emerges into Lake St. Clair, has been the cause of much wonder on the part of those who have seen and have become familiar with its existence by the map, but have no knowledge of its immediate surroundings and causes. This delta has recently been made the subject of a paper by Cole, published by the Michigan Geological Survey (Vol. 9,